

REMARKS

Applicant has reviewed and considered the Office Action dated May 21, 2003, and the references cited therewith.

Claim 1 is amended, no claims are canceled, and no claims are added; as a result, claims 1-66 remain pending in this application. Support for the amendment of claim 1 is found throughout the specification, including, but not limited to, the portion at page 14, lines 21-22.

§103 Rejection of the Claims

Claims 1-60, 63 and 66 were rejected under 35 USC § 103(a) as being unpatentable over Srinivasan et al. (U.S. 6,029,082) in view of Meaney et al. (U.S. 5,841,288).

Applicant respectfully traverses the rejection and submits that *prima facie* obviousness has not been established for various reasons, including the following:

Notwithstanding the amendment of claim 1, Applicant is unable to find, in the proposed combination of Srinivasan and Meaney, a teaching of a transmission line segment, as recited in independent claims 1, 2, 9, 12, 16, 18, 20 and 60. The Office Action refers to item 113 of Meaney, which, Applicant notes, Meaney describes as a "monopole antenna" in various locations (see column 15, lines 29). In addition, Meaney, at column 15, lines 41-44, states that "... the various monopole antennas can be made from coaxial cables imbedded within the core 110, where each of the cables are stripped to expose the center conductor 113a for the antenna." Thus, it appears that "the various monopole antennas" of Meaney refers to the exposed center conductor (after the cables are stripped). As such, no teaching in Meaney appears to meet the recited claim language concerning a transmission line segment as recited in the claims. The Office Action acknowledges that Srinivasan does not teach or suggest a transmission line segment. Furthermore, Applicant is unable to find, in the proposed combination, a teaching wherein, for each current element of the plurality of current elements, the first current path is resonant with the parallel current return path, as recited in claim 1. Thus, the proposed combination does not appear to teach or suggest all recited claim elements.

In addition, Applicant respectfully submits that *prima facie* obviousness has not been established because the Office Action does not set forth the requisite motivation or suggestion for pursuing the proposed combination. The Office Action asserts that "it would have been

obvious to one of ordinary skill in the art at the time the invention was made to use Meaney's transmission lines in Srinivasan coil structure for the purpose of increasing the amount of measurement data of the selected region in the predetermined time with a multi-tuned or variable tuned coil." (*Page 3*). Applicant respectfully traverses and submits that such an assertion does not establish the asserted motivation. In particular, Applicant respectfully submits that the Office Action does not set forth specific, objective evidence of record for a finding of a suggestion or motivation to combine reference teachings. In addition, Applicant respectfully submits that the Office Action does not explain the reasoning by which the evidence is deemed to support such a finding. Rather, it appears that the Office Action asserts a conclusory statement of subjective belief without setting forth cogent reasoning in support thereof.

Furthermore, Applicant notes that M.P.E.P. § 2143.02 requires that the proposed combination cannot change the principle of operation of a reference. Here, Applicant submits that the proposed combination of Srinivasan and Meaney necessarily requires a change in the principle of operation. For example, Srinivasan describes "the less-claustrophobic insert coil 40 of the preferred embodiment is designed to be converted from a conventional sixteen-leg high-pass birdcage coil" (*column 5, lines 50-53*) whereas Meaney describes a "system of . . . quarter wave monopole antennas placed in a highly lossy medium (e.g., 90% saline)" (*column 15, lines 1-14*). Applicant respectfully notes, that such structures employ different principles of operation and that to combine, in the manner proposed, necessitate a change in one or the other of the principles described in the two documents.

Reconsideration and allowance of claims 1-60, 63 and 66 is respectfully requested.

Claims 61 and 62 were rejected under 35 USC § 103(a) as being unpatentable over Srinivasan et al. (US 6,029,082) in view of Meaney et al. (US 5,841,288) and further in view of Yui et al. (US 5,892,359).

In addition to the remarks above, Applicant respectfully submits that the proposed combination of Srinivasan and Meaney with Yui is improper to establish *prima facie* obviousness. The addition of Yui does not address the shortcomings noted above concerning *prima facie* obviousness as to independent claim 1, from which claims 61 and 62 ultimately depend. For example, Yui does not appear to teach transmission line segments, as recited in

claim 1. In addition, the Office Action has not established how Yui provides a motivation or suggestion to combine Srinivasan with Meaney or, even if Srinivasan and Meaney could properly be combined, how Yui provides a motivation or suggestion to combine with Srinivasan and Meaney. In the absence of such a showing, Applicant respectfully submits that the proposed combination does not establish *prima facie* obviousness.

In addition, Applicant is unable to find, in Yui, a "mirror or prism" as recited in claims 61 and 62. The Office Action refers to item 119, however, Applicant is unable to find where Yui describes item 119 as a mirror or prism.

Furthermore, Applicant respectfully submits that each of claims 61 and 62 are dependent on a claim believed to be in condition for allowance. Consequently, it is believed that claims 61 and 62 are also in condition for allowance.

Reconsideration and allowance of claims 61 and 62 is respectfully requested.

Claims 64 and 65 were rejected under 35 USC § 103(a) as being unpatentable over Srinivasan et al. (US 6,029,082) in view of Meaney et al. (US 5,841,288) and further in view of Ziarati (US 5,877,732).

In addition to the remarks above, Applicant respectfully submits that the proposed combination of Srinivasan and Meaney with Ziarati is improper to establish *prima facie* obviousness. The addition of Ziarati does not address the shortcomings noted above concerning *prima facie* obviousness as to independent claim 9, from which claims 64 and 65 ultimately depend. For example, Ziarati does not appear to teach a transmission line segment, as recited in claim 9. In addition, the Office Action has not established how Ziarati provides a motivation or suggestion to combine Srinivasan with Meaney or, even if Srinivasan and Meaney could properly be combined, how Ziarati provides a motivation or suggestion to combine with Srinivasan and Meaney. In the absence of such a showing, Applicant respectfully submits that the proposed combination does not establish *prima facie* obviousness.

Furthermore, Applicant respectfully submits that each of claims 64 and 65 are dependent on a claim believed to be in condition for allowance. Consequently, it is believed that claims 64 and 65 are also in condition for allowance.

Reconsideration and allowance of claims 64 and 65 is respectfully requested.

AMENDMENT AND RESPONSE UNDER 37 CFR § 1.116 – EXPEDITED PROCEDURE

Serial Number: 09/919479

Filing Date: July 31, 2001

Title: RADIO FREQUENCY MAGNETIC FIELD UNIT WITH APERTURE

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Dkt: 600.499US1

Conclusion

Applicant respectfully submits that the claims are in condition for allowance and notification to that effect is earnestly requested. The Examiner is invited to telephone Applicant's attorney (612) 373-6911 to facilitate prosecution of this application.

If necessary, please charge any additional fees or credit overpayment to Deposit Account No. 19-0743.

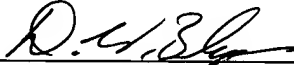
Respectfully submitted,

J. T. VAUGHAN JR. ET AL.

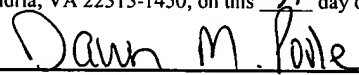
By their Representatives,

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Date August 7, 2003

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